NAVAL TECHNICAL APPRENTICE: A seaman in the non-commissioned ranks of the Royal Canadian Navy who is training for service as an Engineering Technician or as a Hull Technician. An Engineering Technician is responsible for the operation and maintenance of a ship's boilers and machinery. A Hull Technician is responsible for the maintenance of a ship's hull and structure.

HISTORY AND IMPORTANCE

The Engineering Technician and the Hull Technician have long been associated with ships and the navies of the world, although these are comparatively new titles.

In the days of sail and wooden ships, the "carpenter" was responsible for the preservation of the ship's hull, masts and cabins. In battle, he would frequently visit various parts of the ship and, with his helpers, repair damage caused by enemy action. When steel ships replaced wooden sailing ships, he carried out many of the same duties, but the name "carpenter" no longer adequately described his work. He became known as a "shipwright". Because the work today is becoming increasingly technical in nature, the term shipwright is no longer sufficient, and he is known in the Royal Canadian Navy as a "Hull Technician".

During the era of the sailing ship, the "Boatswain" was responsible for the sails and rigging of a ship. With the introduction of steam propulsion, he was supplanted by the engineer. Because of the complex nature of the modern warship, there is an obvious need for an Engineering Technician.

Training competent Engineering Technicians and Hull Technicians for Canada's modern Navy is the aim of the Naval Technical Apprentice Plan. The plan provides an opportunity for young men to obtain a technical education as the basis of a career in the navy.

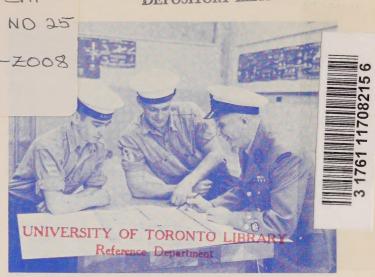
NATURE OF THE WORK

Technical Apprentices are enrolled in the Navy for an initial period of seven years. The first four years are spent as an apprentice and the remaining three are served as a qualified technician and naval seaman.

The work of the Technical Apprentice is essentially that of a student. Following basic naval training, the technical apprentice takes a course to learn the work of a master craftsman, just as a civilian apprentice learns a trade under the guiding hands of qualified machinists, mechanics, welders, plumbers, carpenters, printers or electricians.

Basic naval training immediately follows enrolment. The Technical Apprentice is sent to HMCS Cornwallis, in the Annapolis Valley of Nova Scotia, for 15 weeks. Here he learns naval customs and traditions, discipline and marks of respect. With fully qualified instructors, the course is designed to facilitate the transition from civilian to service life.

DEPOSITORY LIBRARY MATERIAL



On completion of this course, the Technical Apprentice goes to HMCS Naden at Esquimalt, British Columbia, where he commences his 39-months technical training in the Engineering Division of the Fleet School.

The following table is an outline of the syllabus of apprentice training and the time devoted to each subject.

SYLLABUS OF APPRENTICESHIP TRAINING

FIRST 6 MONTHS—ALL TECHNICAL APPRENTICES

	%		%
Fitting Shop	65	Academics	11
Mechanical Drawing	7	Miscellaneous (sports, naval knowledge, social and	
Engineering Theory	6	spiritual relationships)	11
6-24 Mo	NTHS—EN	GINEERING APPRENTICES	

%		%
20	Theory (including drawing)	10
35	Allied Trades	5
11	Machinery and Systems	4
5	Miscellaneous	10
	20 35 11	20 Theory (including drawing) 35 Allied Trades 11 Machinery and Systems

6-24 MONTHS-HULL APPRENTICES

	%		%
Shops	17	Academics	11
Allied Trades	41	Theory (including drawing)	12
Practical (At Sea)	5	Miscellaneous	14

24-30 Months - Engineering Apprentices

Marine Engineering Afloat - 100% (Operation and Maintenance of Marine Engines and Boilers)

24-30 Months-Hull Apprentices

Hull Training Afloat - 100% (Hull, Hull Fittings and Systems—General Maintenance)

30-39 Months - Engineering Apprentices

	%		%
Combined Shops	25	Theory	20
Allied Trades	11	Machinery and Systems	22
Academics	7	Miscellaneous	15

30-39 Months-Hull Apprentices

	%		%
Shops	43	Theory (Including Drawing)	24
Equipment (Operation and Maintenance)	9	Miscellaneous	24

WORKING CONDITIONS

The Naval Technical Apprentice's working conditions are not unlike those of a student attending a technical vocational high school or a technical institute. The Engineering Division of the Fleet School at HMCS Naden is housed in modern buildings containing the latest available equipment and training aids. The instructors, both service and civilian, are highly experienced and use up-to-date instructional techniques.

The apprentice works eight hours a day, five days a week. He has many opportunities to pursue hobbies, sports and recreational activities. HMCS Naden is well equipped for swimming, softball, volleyball, basketball and many other sports. Well stocked libraries are also available.

QUALIFICATIONS NECESSARY FOR ENTRY AND SUCCESS

Applicants seeking entry into the Royal Canadian Navy through the Technical Apprentice Training Plan must be over the age of 16 but under 19 on the 1st of July preceding enrolment. They must have successfully completed Grade 10, be single, and meet the medical and aptitude standards of the Navy. The consent of parents or guardian is required for applicants under the age of $17\frac{1}{2}$.

Applicants are required to write pre-selection examinations. These consist of a preliminary examination in General Science, English and Mathematics. Aptitude tests and selection board interviews are also conducted.

PREPARATION NEEDED

Successful applicants for Technical Apprentice training should have an aptitude for mechanics. Technical or manual training in schools is an asset, and young men who have had technical school training will have some advantage, although such a background is not essential.

While Grade 10 is the minimum educational requirement for entry as an Ordinary Seaman (Apprentice), the more education a man has the better are his chances for success. Education not only increases a man's potential for training and advancement but also improves his chances of qualifying for promotion to commissioned rank.

Service in the Royal Canadian Naval Reserve, the Royal Canadian Sea Cadets, or experience in other cadet organizations, the Boy Scouts, or Sea Scouts, is not necessary but may prove to be an advantage.

EMPLOYMENT, ADVANCEMENT, OUTLOOK

The Technical Apprentice is enrolled into the navy for a seven-year term in the rank of Ordinary Seaman (Apprentice). He is promoted to Able Seaman after 15 months and to Leading Seaman after another 15 months. On completing the 39-month apprenticeship course, he enters the trade for which he has been trained, either Engineering Technician or Hull Technician, and goes to sea in one of the RCN's ships. He has attained the technical qualifications necessary for promotion to the rank of Petty Officer 2nd Class.

The progress of the naval seaman's ability in his trade is measured in trade groups. The lowest is trade group 1 and the highest is trade group 4. The steps to trade group advancement are on-the-job training, practical experience

affoat and ashore, and formal courses ashore. The attainment of trade group levels is necessary for promotion in rank. With rank go extra pay and responsibility for supervision of subordinate naval seamen.

Those apprentices who decide on a career in the Royal Canadian Navy may qualify for promotion up to the rank of Chief Petty Officer First Class, the highest non-commissioned rank in the service. For those who wish to make a career in the service, re-engagements subsequent to the first 7 years of service are for 5-year periods plus one 3-year period up to a total of 25 years service. Opportunities are provided for men to gain promotion to commissioned rank.

REMUNERATION

Naval Technical Apprentices are paid on a scale comparable to apprentices in civilian life.

The following is a table of monthly pay rates:

BASIC MONTHLY PAY

Ordinary Seaman (Under 17)	\$ 60.00
Ordinary Seaman (Over 17)	112.00
Ordinary Seaman (Trained)	119.00
Able Seaman	138.00
Leading Seaman	195.00
Petty Officer 2nd Class	219.00
Petty Officer 1st Class	251.00
Chief Petty Officer 2nd Class	289.00
Chief Petty Officer 1st Class	324.00

In addition, the Technical Apprentice is provided with meals and accommodation.

There is also trades pay ranging from \$12.00 per month at the Ordinary Seaman Trade Group 1 level to \$90.00 per month at the Chief Petty Officer Trade Group 4-A level.

For example a Leading Seaman who has reached the Trade Group 3-A level, who is married and not provided with meals and accommodation, receives the following pay and allowances:

Basic Monthly Pay	\$195.00
Trades Pay	63.00
Marriage Allowance	30.00
Subsistence Allowance	100.00
Kit Up-Keep Allowance	7.00
Total	\$395.00

Progressive increments, ranging from \$4 to \$10 a month, are paid after the second, fourth and sixth year of service in most ranks.

The maximum pay and allowances for a married Chief Petty Officer 1st Class amounts to \$593.00 a month.

A pension plan on a contributory basis of 6% of pay and allowances provides security for the man who wishes to make a career in the navy. On retirement, he receives a life annuity of 2% of his annual pay and allowances averaged over any six years he selects, multiplied by the number of years he has served. A married Chief Petty Officer 1st Class who has served 25 years and has six years in his rank would receive an annual pension of over \$3,000.00.

Other benefits include free medical and dental care hospitalization, and 30 days' leave annually on full pay. For married personnel, a group surgical-medical insurance plan is available for dependents.

ADVANTAGES

Among the advantages for those men who qualify under the Navy's Technical Apprentice Plan is the guarantee of employment at the end of apprenticeship. Tools and equipment are supplied by the Navy. The training is of a high standard under qualified instructors and the apprentice is paid a regular income. He is not required to pay any tuition or training fees.

The graduate of the naval apprenticeship plan enjoys the same advantages as any other naval seaman. A career in the Royal Canadian Navy is more than just a job. The naval seaman has the opportunity to combine the exercise and development of his technical and leadership capabilities with the unique features of life in the naval tradition. The RCN is a modern service of men and ships devoted to the defence of Canada and the cause of peace. By virtue of his training and varied experience, the naval seaman becomes an adaptable, self-reliant and skilled individual.

Exercises and cruises take Canadian naval ships to many foreign countries and ports where the naval seaman plays an important role as a representative of Canada. During such visits there are opportunities for meeting people of these lands and for broadening one's knowledge of the world in general.

Comradeship and adventure can be combined with normal home life, financial security, and a good pension at a relatively young age. Organized recreational and sports activities are encouraged.

In addition to advancement and promotion in a naval seaman's career, the RCN offers a young man opportunities for improving his formal education to the point where he may qualify academically for promotion to commissioned rank. While the Navy gives encouragement and assistance, such advancement depends largely on the initiative and effort of each individual.

DISADVANTAGES

The career serviceman has a secure position, but his life is not easy. He is sometimes required to work for prolonged periods in situations of test and hazard, exposed to bad weather and discomfort, in positions of responsibility for the safety of others at sea. Discipline is required of him.

Separation from his family during cruises of his ship may be a hardship, but these are well interspersed with periods when his ship is in home port. In fact, when shore appointments are taken into consideration, the seaman's time away from his family is short, not only in relation to his whole career time, but also in relation to the time spent away from home by men in many other vocations. With his family he may be transferred for employment in different parts of Canada. This could produce difficulties for the education of children.

The naval seaman at times may have to put his own inclinations and preferences second to those of the service, and will have to give up a degree of personal privacy. While training and when at sea, he lives in close proximity to his fellows, under rules and regulations which ensure an orderly and congenial life.

The naval seaman's pay, depending upon his rank and family responsibilities, provides a comfortable and steady standard of living, but men of the same ability, in equivalent technical trades in industry, may make more take-home pay.

Merit is recognized through advancement in trade group and promotion in rank, with the consequent pay increases. However, there is no quick avenue to the senior ranks other than by qualifying for commissioned rank. Each non-commissioned rank, with its responsibilities and privileges, must be held for a minimum length of time before the next can be attained.

HOW TO GET STARTED TOWARD THE OCCUPATION

A young man who desires to obtain more information or to make application for the Technical Apprentice Training Plan should visit or write the Naval Recruiting Officer in any of the following cities:

Vancouver, B.C. Victoria, B.C. Calgary, Alta. Edmonton, Alta. Regina, Sask. Saskatoon, Sask. Winnipeg, Man. Fort William, Ont. Windsor, Ont. London, Ont. Ottawa, Ont. Hamilton, Ont. Toronto, Ont. Kingston, Ont.

North Bay, Ont. Montreal, Que. Quebec City, P.Q. Saint John, N.B. Charlottetown, P.E.I. Halifax, N.S. St. John's, Nfld.

RELATED OCCUPATIONS

The Naval Technical Apprentice, like technical apprentices in civilian life, is essentially a student learning a master's craft, gaining in experience, ability, and earning power. However, unlike his civilian counterpart, the naval technician is proficient in more than one specific skill. He is unique in this respect, as well as by virtue of being in the naval profession as a seaman.

FOR FURTHER READING

BOOKS: The Far Distant Ships—By Joseph Schull, Queen's Printer, Ottawa, Ontario.

PAMPHLETS: Navy Careers and Education.—Available from the nearest RCN Recruiting Office or by writing to: The Naval Secretary, Naval Headquarters, Ottawa, Ontario.

PERIODICALS: *The Crowsnest*—The Royal Canadian Navy's magazine. (Monthly). Queen's Printer, Ottawa, Ontario.

This occupational information monograph was published in May, 1964. It was prepared by Naval Headquarters, Ottawa, and is one of a series on occupations in the Royal Canadian Navy.



